



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/671,731	09/29/2000	Thomas Grassl	JEK/Grassl	4440
7590 04/05/2005 Bacon & Thomas PLLC 625 Slaters Lane 4th Floor Alexandria, VA 22314-1176			EXAMINER GURSHMAN, GRIGORY	
			ART UNIT 2132	PAPER NUMBER

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/671,731

Applicant(s)

GRASSL ET AL.

Examiner

Grigory Gurshman

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-10 and 12-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-10, 12-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The formal drawings submitted on 9/23/04 are accepted by examiner.

### *Response to Arguments*

2. Claims 2 and 11 have been canceled. Applicant states that new claim 19 has been added. However, new claims 19 has not been submitted with the amendment filed on 3/22/2005.
3. Referring to claims 1, 3-10 and 12-16, Applicant argues that Pearce and Sloan do not disclose or suggest erasing from a security memory based on attacks on a component. Examiner disagrees and point out that this limitation is explicitly taught by Sloan, who teaches that in order to make the stored data secure, the equipment comprises one or more sensors (a, b, c) which sense a predetermined characteristic of an authorized user and cause erasure of the stored data if this characteristic is absent e.g. for more than a predetermined time (see Sloan, abstract).
4. Applicant further argues that neither Pearce nor Sloan disclose or suggest using dual threshold sensors ("overshoot" and "undershoot") for detection of external actions against a secured data storage. Examiner points out that undershooting a threshold is only recited in claim 1, using the limitation "overshooting or undershooting of a threshold". Claim 19 (new) allegedly reciting this limitation has not been submitted  
According to this claim language, Pearce teaches one of the limitations, exceeding (i.e. overshooting) the threshold. Examiner also points out that one of ordinary skill in the art

Art Unit: 2132

would have equated determination of an attack by detection of undershooting with detection of overshooting since it works exactly the same way on the sensors. The implementation of the detection process comes down to comparing some incoming values with the range determined by the threshold value. That is consistent with teachings of Pearce, who discloses a sensor within the personal computer for transmitting an alarm through the data transmission network when the detected parameter of the security device exceeds the stored threshold even if the personal computer is in its non-operational state (see column 6, lines 15-25).

5. Applicant further argues that the prior art of record does not teach cyclical storage of sensor data in over-writable memory. Examiner points out that the limitation "recording device, which permanently records the status data of the sensors in a memory" is met by a transmission network used to report the incident to a monitoring station for appropriate logging and action (see abstract of Pearce). Reporting and logging of incidents meets the limitation "storing the status data cyclically".

6. Applicant also argues the technical features of claimed invention versus the technical features of the art of record. Examiner points out that while these differences may exist they are not adequately reflected in the Applicant's claims.

7. In view of the reason provided herein, the rejections of claims 1, 3-10 and 12-16 are maintained.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 3-10 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearce (U.S. Patent No. 6,308,272) in view of Sloan (GB 227107A).

10. Referring to the instant claims, Pearce discloses a security system using existing network and personal computers (see abstract). Pearce teaches the security system using a security detector associated with a personal computer attached to an existing data transmission network, where the personal computer is effective to detect security breaches and transmit an alarm even if the personal computer is not in its operating mode. When a security breach is detected by the security detector, the data transmission network is used to report the incident to a monitoring station for appropriate logging and action (see abstract). Pearce also teaches a sensor within the personal computer for transmitting an alarm through the data transmission network when the detected parameter of the security device exceeds the stored threshold even if the personal computer is in its non-operational state. The sensing means within the personal computer including a secondary processor which is operational even when the personal computer is in its non-operational state, whereby an alarm is transmitted when the secondary processor detects that the output of the security device exceeds the stored threshold (see column 6, lines 15-25).

11. Referring to the independent claims 1 and 10, the limitation "sensors to detect external action on component containing the secured data storage" is met by the sensor (195 in Fig.2). The limitation "a sensor evaluation devise" causing some action "when a threshold is overshoot on one of the sensors" is met by a sensor within the personal computer for transmitting an alarm through the data transmission network when the detected parameter of the security device exceeds the stored threshold (see column 6, lines 15-25). The limitation "recording device, which permanently records the status data of the sensors in a memory" is met by a transmission network used to report the incident to a monitoring station for appropriate logging and action (see abstract). Reporting and logging of incidents meets the limitation "storing the status data cyclically".

12. Pearce, however, does not teach erasing the content of the security data memory when a threshold is overshoot. Referring to the instant claims, Sloan discloses an equipment for electronically storing data (see abstract). Sloan teaches that in order to make the stored data secure, the equipment comprises one or more sensors (a, b, c) which sense a predetermined characteristic of an authorized user and cause erasure of the stored data if this characteristic is absent e.g. for more than a predetermined time (see abstract). Sloan also teaches that in case of sensor a, a timer 12 causes erasure of data stored in a RAM 15 if the life function is below a threshold level for a preset time. In the case of sensors b and c, the timer 12 causes erasure of the data if successful comparisons are not regularly performed. In the case of sensor c a predetermined number of unsuccessful comparisons causes erasure. Furthermore, a sensor 17 is

sensitive to breaking- open of the equipment, to cause erasure of the data (see abstract and Fig.1).

13. Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to use sensors for detecting external action on the security data memory of Pearce and erase data if the parameters are below the threshold as taught in Sloan. One of ordinary skill in the art would have been motivated to use sensors for detecting external action on the security data memory and erase data if the parameters are below the threshold as taught in Sloan in order to make the stored data secured (see Sloan abstract).

14. Referring to claims 1, 3, 4, 5, 12, Pearce teaches that status data of the sensors is stored in memory (see Fig.3).

15. Referring to claims 7 and 16, it is well known in the art to use a backup battery coupled top the computer. One of ordinary skill in the art would have been motivated to use the battery for maintaining the operation of the security sensors and detecting the attacks.

16. Referring to claims 12-13, Pearce teaches cyclically storing the status data of the sensors by the data recording device (see Fig.3). The status data is sent through I/O (unit 58) to EEPROM and to INST RAM and DATA RAM (units 59, 52 and 54 respectively).

### ***Conclusion***

Art Unit: 2132

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grigory Gurshman whose telephone number is (571)272-3803. The examiner can normally be reached on 9 AM-5:30 PM.

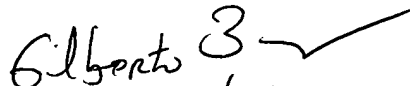
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571)272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



GG

Grigory Gurshman  
Examiner  
Art Unit 2132



GILBERTO BARRÓN JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100